50065 DCC Adapter - compatibility with Opticron eyepieces

The following list shows which insert (or set of inserts) are required to fit a particular eyepiece.

Current price for the recommended eyepiece HDF T 40810 is listed in table below.

50066 ø51	50067 ø45.5	50068[1] ø41.5	50069[2] ø33
HDF T 40862	HDF T 40810 HR2 40933 HDF T 40872 dis HDF T 40809 HDF 40862 dis HR MM2 40909[3]	HR2 40930[3] HR2 40931[3] IS 40918[3]	HR 40812[3] HR 40813[3] dis

[1]50068 insert only fits in combination with 50067 insert
[2]50069 insert only fits in combination with 50068 and 50067 inserts
[3]Remove rubber eyecup before connecting DCC adapter
dis - discontinued eyepieces

Accessories

Chosen specifically to complement the camera, camera mount and DCC adapter, the following accessories are available to purchase separately.

SD Memory 8GB

Storage 8GB:

Images
16M (4608x3456 pixels)
1214 exp

Movies
HD 1280x720 30mins
VGA 640x480 30mins

Code: 50072
(Other brand may be supplied)

Li-ion Battery

BCK-7E 3.6V 680mAh
Code: 50173

Cable Release Frame

Includes cable release
Code: 50144

Pricing

Code	Model	SRP £ inc VAT
50205	**FS45 DCC Kit** price includes; FS45 camera + camera mount, 50072, 50065, 50066 & 50067	199.00
50206	**FS45 SDL DCC Kit** price includes; FS45 camera + camera mount, 50072, 41114	199.00
50173	Battery BCK-7E 3.6V 680mAh	39.99
50072	Panasonic 8GB SD (or equivalent)	10.99
50144	Cable Release Frame (including cable release)	29.99
41114	Photoadapter Push-fit SDL (28mm thread)	55.00
50065	DCC Adapter	39.00
50066	51mm insert for 50065	10.00
50067	45.5mm insert for 50065	10.00
50068	41.5mm insert for 50065 50068 insert only fits in combination with 50067 insert	10.00
50069	33mm insert for 50065 50069 insert only fits in combination with 50068 & 50067 inserts	10.00
	Recommended Eyepiece	
40810	HDF T	139.00

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opticron

Digital Compact Camera Kits

featuring the Panasonic Lumix FS45 Camera with 50065 DCC Adapter or 41114 Photoadapter Push-fit SDL (28mm thread)

Product Information & User Guide

including Retail Price List

July 2013

Opticron FS45 digital compact camera kits are a high quality, easy to use solution to the problem of choosing a suitable compact camera for high magnification telephotography (digi-scoping). FS45 kits contain a Panasonic Lumix FS45 camera with 8GB SD memory card and bespoke camera mount plus the option of one of the following:

a. DCC Adapter and 2 inserts for connection to selected HDF T, HDF, HR2 and HR eyepieces
b. Photoadapter Push-fit SDL (28mm thread) for connection to the 40935 and 40936 SDL eyepieces.

Optional accessories include a universal cable release system and spare Panasonic Li-ion rechargeable battery.

Product Information

Camera fitted with mount

Panasonic Lumix FS45 Camera

- 16.1 megapixel CCD
- HD movie recording
- Optical image stabiliser
- Zoom lens f.4.3-21.5mm aspheric 5x optical zoom
  35mm equivalent; 24mm to 120mm
- F2.5~F6.4
- TTL auto focus
- Shutter: 8~1/1600
- Shooting: single or burst
- Exposure
  - Metering: Multiple
  - Compensation: ±2EV 1/3 EV steps
  - ISO: auto, 100, 200, 400, 800, 1600, High sense mode 1600-6400
- Modes
  - Program (Intelligent Auto, Normal, 15 Scene, Miniature)
- 7.5cm (3.0") TFT LCD display
- WxHxD: 96.0x57.1x19.4mm
- Weight: 106g (w/o battery & card)

Supplied complete with 3.6V Li-ion rechargeable battery, charger and software

41114 Photoadapter Push-fit SDL (28mm)
A lightweight aluminium tube assembly manufactured to the diameter of the 40935/36 SDL eyepieces. Camera side, the adapter is fitted with a 28mm[1] step ring that connects to the camera mount. Eyepiece side, the push-fit connection over the SDL eyepiece has a locking thumb screw.

Note: To get the best image when using the 40935 SDL, adjust magnification setting on the eyepiece to; HR 66 38x, HR 80 48x, GS 665 32x, GS 815, ES 80 40x

[1] Also supplied with 42mm T-mount step ring

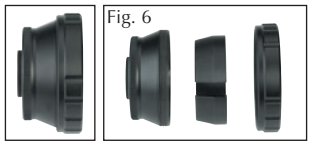

Fig. 6

50065 DCC Adapter
The DCC Adapter comprises an aluminium tube & locking ring that can be fitted with a number of compression ring inserts of different diameters.
Camera side, the DCC Adapter features a 28mm thread connection to the lens mount supporting the camera. Eyepiece side, the push-fit connection over specific HDF or HR eyepieces has anti-clockwise lock down.
Inserts are available in a choice of internal diameters to suit different eyepieces;

- 50066 Ø51mm
- 50067 Ø45.5mm
- 50068 Ø41.5mm[1]
- 50069 Ø33mm[2]

[1] 50068 insert only fits in combination with 50067 insert.
[2] 50069 insert only fits in combination with 50068 and 50067 inserts.

User Instructions

1. Choosing an eyepiece (50065 DCC Adapter only)

For the highest overall image quality use **HDF T 40810** eyepiece with 50067 insert. Depending on the focal length and objective dia. of your telescope, other suitable eyepieces include; HDF T 40862, HDF T 40809, HR2 40933 and HR2 40930.

2. Initial setup

Before connecting everything together, set up your telescope and eyepiece on a tripod as you would for viewing, making sure your chosen eyepiece is screwed firmly into position. Focus on an object in the normal way until the image being viewed comes into sharp focus. Twist-type eyecups should be in the 'down' position and fold down rubber eyecups should be removed from the eyepiece.

3. Attaching the camera mount to the camera body

The camera slots into the cradle [Fig. 1] and is fixed in position by screwing the thumbscrew into the 1/4" socket on the underside of the camera body [Fig. 2]

4. Preparing and fitting your chosen adapter

- Assemble the component parts of your chosen adapter as illustrated on previous page. [Fig. 6]
- If using the 41114, make sure the 28mm threaded step ring is fitted to the main housing.
- Screw the adapter onto the camera mount. [Fig. 3]
- The camera is now ready to attach to the viewing eyepiece. [Fig. 4]

5. Fitting the combined assembly to the telescope eyepiece [Fig. 5]

- Place assembly over the eyepiece and push down until the internal wall of the adapter comes into contact with the end of the eyepiece. [a]
- For 50065 DCC Adapter, hold the main section of the adapter secure and turn the locking ring anti-clockwise until tight making sure the camera remains horizontal. [b]
- For 41114 Photoadapter Push-fit SDL, tighten thumb screw.
- Turn the camera ON, making sure the flash is switched off before taking photographs. For additional guidance on how to operate the camera please read the instructions supplied.

Tips for taking pictures

- The FS45 doesn't have a viewfinder so images are composed using the LCD monitor. When the camera is turned on the LCD monitor will show a single rounded picture of the image you originally set your scope and eyepiece to. Once this single rounded picture is obtained you can adjust the camera zoom to eliminate any vignetting and make any fine focus adjustments using the telescope.
- For general digi-scoping use sport mode and adjust the exposure using the menu control as required. To minimise shake when pressing the shutter, use a pinch grip with your thumb on the base of the camera, try the 2 sec timer or optional cable release frame.

Fig. 1

Fig. 2

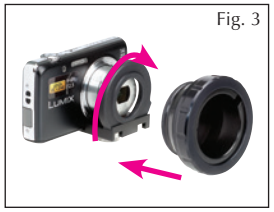

Fig. 3

Fig. 4

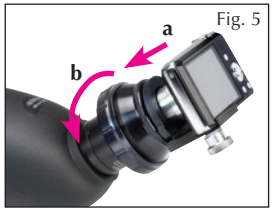

Fig. 5